

REMARKS

Claims 19, 20, 22, 23, and 30 remain in this application with claim 19 in independent form. Claims 1, 24, and 29 have been cancelled in this Amendment. Claims 19 and 30 have been amended. There is full support in the specification as originally filed for these amendments and no new matter has been introduced through these amendments.

Claims 1, 29, and 30 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctively claim the subject matter. Claim 1 has been cancelled and therefore the 35 U.S.C. §112 rejection is moot.

Claims 1, 19, 20, 22-24, 29, and 30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bauvois (United States Patent No. 5,288,442). The Examiner contends that Bauvois is directed toward a process for manufacturing a molded structure that includes damping elements. Further, the Examiner contends that Bauvois teaches that it is known in the art to mold a structure of thermoplastic polyurethane (TPU) by injecting a polymerizable foam into the space provided by the TPU. The polyurethane foam expands in situ and forms the final structure having the shape of the mold.

Applicant respectfully traverses the Examiner's rejection. First, Bauvois generally discloses a foam core made from plastic, such as a core of expandable foam (*see col. 3, line 3-4*) or a polyurethane foam from a polyol and an isocyanate (*see col. 4, lines 19-20*). The structure of Bauvois is used especially in the manufacture of skis. Those skilled in the art recognize that there are various types of foams made from plastic and made from polyols and isocyanates, such as for example, rigid polyurethane foams, semi-rigid polyurethane foams, flexible polyurethane foams, high resilience polyurethane foams, and the like. The expanded

core of foam taught in Bauvois provides support for rigid reinforcing elements, upper, and lower shells that form the structure. There is no teaching, suggestion, or motivation in Bauvois to form the expandable foam core from a microcellular polyurethane elastomer as claimed in the present claim.

Further, it would not have been obvious to use the microcellular polyurethane elastomer based upon the teachings of Bauvois. Those skilled in the art recognize that microcellular polyurethane elastomers are typically formed without blowing agents and as such do not rapidly expand. Bauvois teaches forming the core from an expandable material to force a deformable tubular element formed from TPU outward against the mold. The deformable tubular TPU element also includes a rigid plate that adheres the outer shells with the inner core. Therefore, the expanded foam core does not adhere to the deformable tubular TPU element, otherwise the deformable tubular TPU element would not force the rigid plate against the shell to form the shape of the mold. In order to force the deformable tubular element outwards, the core of expanded foam must sufficiently expand to deform the tubular element. As amended, the subject invention claims the microcellular polyurethane elastomers are chemically bonded to the TPU layer. The microcellular polyurethane elastomer layer does not expand with a force sufficient to deform a tubular element outwards. On the contrary, the subject invention forms the TPU molding and then places the formed TPU in a mold. The microcellular polyurethane elastomer is reacted in direct contact with the TPU molding to adhere the microcellular polyurethane elastomer directly to the TPU molding.

Claim 19 recites the composite damping element is received in a transverse link, a longitudinal link, a triangular link, a rear-axle subframe, a stabilizer, a spring-strut support, or a shock-absorber. Bauvois is directed toward forming a complex molded structure, especially a ski (*see col. 1, lines 9-10*). Further, Bauvois states that complex molded article is traditionally meant to be a molded structure comprising stiffening or reinforcing elements being in the form of wires or in the form of clothes, or even in the form of plates, protection elements, and/or various mechanical elements such as, for example, damping elements, lightening elements, and/or decoration elements (*see col. 1, lines 12-20*). There is no teaching, suggestion, or motivation to use the damping element in the transverse link, the longitudinal link, the triangular link, the rear-axle subframe, the stabilizer, the spring-strut support, or the shock-absorber. One skilled in the art attempting to replace a rubber-metal damping element in any one of these recited structures would not have relied on technology relating to a process for making a ski. Therefore, Bauvois teaches away from using a microcellular polyurethane elastomer and Claim 19 as amended is believed to be allowable.

Claim 19 has also been amended to more clearly state that the composite damping element is received in a transverse link, a longitudinal link, a triangular link, a rear-axle subframe, a stabilizer, a spring-strut support, or a shock-absorber. Additionally, claim 19, as amended, recites the microcellular polyurethane elastomer layer is chemically bonded in direct contact with at least one surface of the thermoplastic polyurethane molding. In this manner, the microcellular polyurethane elastomer layer dampens and absorbs vibrations of the transverse link, the longitudinal link, the triangular link, the rear-axle subframe, the stabilizer, the spring-strut support, and the shock-absorber. The TPU molding supports the microcellular

polyurethane elastomer layer in the transverse link, the longitudinal link, the triangular link, the rear-axle subframe, the stabilizer, the spring-strut support, or the shock-absorber in such a manner that the microcellular polyurethane elastomer layer dampens vibrations occurring therein. There is no teaching, suggestion, or motivation for the composite damping element as claimed in amended claim 19 in Bauvois or any other cited prior art, nor is it obvious. Therefore, the 35 U.S.C. §103 rejection is overcome and claim 19 is believed to be allowable.

Accordingly, it is respectfully submitted that the Application, as amended, is now presented in condition for allowance, which allowance is respectfully solicited. Applicant believes that no fees are due, however, if any become required, the Commissioner is hereby authorized to charge any additional fees or credit any overpayments to Deposit Account 08-2789. Further and favorable reconsideration of the outstanding Office Action is hereby requested.

Respectfully submitted,

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Date



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